

ABSTRACT OF THE DISCLOSURE

A method for performing turbo decoding in an advanced mobile communication system is disclosed, in which an interleaving operation, a maximum a posteriori (MAP) decoding operation, and a deinterleaving operation are implemented simultaneously. Signals stored in a specific address space of a memory are decoded in a predetermined order and, at the same time, each decoded signal is stored in the same specific address space previously used to store the signals prior to decoding. Accordingly, the turbo decoding time can be reduced by half and the size of the memory for storing extrinsic information can also be reduced by half.